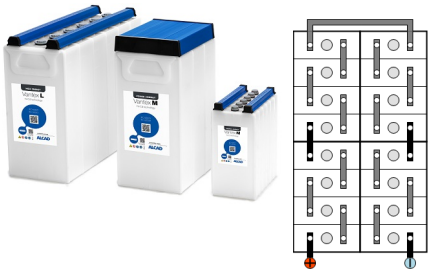
Reliability inside

VTX 1 M 220 - Cell data sheet

Classification

Brand	Alcad
Cell type	VTX 1 M 220
Cell P/N	310561684
Capacity at 5 hours rate	220 Ah
IEC Designation	KGM220P
According to IEC 62259	



Wiring principle Normal

Physical data

Overall height	421 mm		
Cell height			
Width	195 mm	Weight per cell	12,0 Kg
Block length - 4 cells	352 mm	Block length - 5 cells	437 mm
Block length - 6 cells	522 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	1
Separator type	Felt	Terminal material	Steel
Connection torque	30,0 +/- 3,0 Nm	Vent type	Low pressure flame arresting vent (large)
Terminal size	M10 SW 16 mm		
		Handle	Yes

Plates

Positive		Negative	
Type of plates	Maintenance Free Pocket	Type of plates	Maintenance Free Pocket

Electrolyte

Electrolyte type: Renewal	E13	Max/Min	50 mm
Electrolyte type: Initial	E22	Vent oil quantity	
Electrolyte per cell: Liquid	2,9 liters		

Connection

Cable area of internal connection cables	70 mm²	End-lug (and external cable)	70 mm²

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Charging

Float voltage	1,42 V/Cell	High rate voltage (min)	1,45 V/Cell
Single-level voltage	1,42 V/Cell		

Resistance/Short circuit

Internal resistance	0,52 mOhm	Short circuit current	2385 A

Performance data

Current discharge

After prolonged float charge of fully charged cells. Available amperes at +20°C +/- 5°C (+68°F +/- 9°F)

V/Cell	10h	8h	5h	3h	2h	1,5h	1h	30m	20m	15m	10m	5m	1m	30s	5s	1s
1	22,0	27,4	44,0	70,5	103	135	180	246	278	299	324	376	396	454	517	555
1,05	21,9	27,2	42,8	69,7	102	128	160	205	231	247	266	308	338	385	437	468
1,1	21,7	26,9	42,2	68,0	94,4	111	131	161	177	187	205	241	279	321	366	389
1,14	21,3	26,4	40,8	62,5	78,1	86,8	100	123	134	142	155	189	220	257	295	311

Power discharge

Available power (W), after prolonged float charged of fully charged cells at +20°C +/- 5°C (+68°F +/- 9°F)

V/Cell	10h	8h	5h	3h	2h	1,5h	1h	30m	20m	15m	10m	5m	1m	30s	5s	1s
1	26,3	32,4	51,4	78,6	112	144	186	250	281	300	325	376	396	454	517	555
1,05	26,2	32,2	50,0	78,0	111	139	171	217	244	260	280	323	355	404	459	492
1,1	25,9	31,9	49,6	77,8	107	124	146	178	195	206	226	266	307	353	402	428
1,14	25,4	31,3	48,2	72,7	90,3	100	115	141	153	162	176	215	251	293	336	354

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Kt Factor

Current discharge

After prolonged float charge of fully charged cells. Kt factor at +20°C +/- 5°C (+68°F +/- 9°F)

V/Cell	10h	8h	5h	3h	2h	1,5h	1h	30m	20m	15m	10m	5m	1m	30s	5s	1s
1	10,0	8,04	5,00	3,12	2,13	1,63	1,22	0,89	0,79	0,74	0,68	0,59	0,56	0,48	0,43	0,40
1,05	10,0	8,09	5,14	3,16	2,17	1,71	1,38	1,07	0,95	0,89	0,83	0,71	0,65	0,57	0,50	0,47
1,1	10,1	8,18	5,22	3,24	2,33	1,99	1,68	1,37	1,25	1,18	1,07	0,91	0,79	0,69	0,60	0,57
1,14	10,3	8,35	5,38	3,52	2,82	2,53	2,20	1,79	1,64	1,55	1,42	1,16	1,00	0,86	0,75	0,71

Power discharge

Kt factor power, after prolonged float charged of fully charged cells at +20°C +/- 5°C (+68°F +/- 9°F)

V/Cell	10h	8h	5h	3h	2h	1,5h	1h	30m	20m	15m	10m	5m	1m	30s	5s	1s
1	8,37	6,80	4,28	2,80	1,96	1,53	1,18	0,88	0,78	0,73	0,68	0,59	0,56	0,48	0,43	0,40
1,05	8,41	6,84	4,40	2,82	1,98	1,59	1,28	1,01	0,90	0,85	0,79	0,68	0,62	0,54	0,48	0,45
1,1	8,50	6,89	4,44	2,83	2,06	1,77	1,51	1,24	1,13	1,07	0,97	0,83	0,72	0,62	0,55	0,51
1,14	8,65	7,02	4,57	3,02	2,44	2,20	1,91	1,57	1,44	1,36	1,25	1,02	0,88	0,75	0,66	0,62